

REMARKS

With entry of this amendment, claims 1-8, 10, and 12-27 are pending in this application, claims 1-8, 10 and 12-26 of which stand rejected, and claim 27 of which has been newly added. Based on the foregoing amendments and following remarks, reconsideration and allowance of this application is respectfully requested.

Claim Rejections-35 U.S.C. §103

Claims 1-8, 10, and 12-26 stand rejected under 35 U.S.C. §103 as being obvious over U.S. Patent No. 5,894,733 (“Brodner”) in view of U.S. Patent No. 5,855,289 (“Moore”). Applicants respectfully traverse the rejections of claims 1-8, 10, and 12-26, since none of these references, alone or in combination, disclose or suggest the features required by these claims, as amended.

In particular, the independent claim 1 was amended to require at least a portion of the lowermost edge of the lug to be perpendicular to the outer surface of the body. Support for this amendment can be found in Fig. 5 of the specification, which illustrates at least a portion of lowermost edge of the anti-rotation lug 18 being perpendicular to the outer surface of the body 12. In contrast, no portion of the lower edges of the ridges 56 of the Brodner sleeve structure 12 is perpendicular to the outer surface of the sleeve structure 12. Rather, they appear to be tapered or beveled, as clearly shown in Fig. 2 of the Brodner. More relevant to the obviousness issue, there is no suggestion or disclosure in Brodner that that the lowermost edges of the ridges 56 can be made to be perpendicular to the outer surface of the sleeve structure 12.

In fact, there would be no desire or motivation to do so. Significantly, if the lowermost edges of the ridges 56 of Brodner were made to be perpendicular to the outer surface of the sleeve structure 12, the objective of Brodner would be defeated. It is an established principle that if a proposed

modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. See In re Gordon, 733 F.2d 900 (Fed. Cir. 1984). Brodner indicates that the purpose of the ridges 56 is to provide a locking engagement with the ridges 68 of the tray 16 when the combination of the sleeve structure 12 and vial 10 is slid into the aperture 62 of the tray 16. Brodner specifically states:

The ridges 56 provide locking engagement of the combination 14 when the combination 14 is inserted into a receiving aperture 62 of the tray 16. Upper edges 64 extending about an opening 66 of the aperture 62 preferably contain a plurality of small ridges 68 which produce a locking type action when the ridges 56 are in pressing engagement thereagainst or between. (col. 3, lines 34-41).

It is clear, however, that if the lowermost edges of the ridges 56 were perpendicular to the outer surface of the sleeve structure 12, they would most likely abut against the uppermost edges of the tray ridges 68 when attempting to slide the sleeve structure 12 within the tray aperture 16. As a result, the sleeve structure 56 could not be mounted within the tray 16, or at the least, there would be difficulty in doing so without manual intervention by the user. Thus, the lowermost edges of sleeve structure ridges 56 must be tapered or beveled for the Brodner device to properly operate, and there would be no suggestion or motivation to modify them.

To the extent that the Examiner may rely on the Decision of the Board of Patent Appeals and Interferences in its Decision, dated October 22, 2003 ("Appeal Decision") as a basis for any subsequent rejection of the claims, Applicants would like to address certain portions of this Decision in order to expedite the prosecution of this application. In particular, the Board stated:

Brodner does not disclose that the lower edges of the ridges are beveled or tapered, or indicate that they should be beveled or tapered, and the ridges in figure 4, particularly the one on the left side, appear to have lower edges which are perpendicular to the body outer surface. Thus, the ridges which Brodner would have been fairly suggested to one of ordinary skill in the art include ridges having lower edges which are substantially perpendicular to the body outer surface. (Appeal Decision, page 5, lines 7-15).

The Appeal Board seems to suggest from this excerpt that the fact that Brodner does not state that the lower edges of the ridges must be beveled or tapered suggests to one of ordinary skill in the art that the lowermost edges of the ridges can be perpendicular. It is true that Brodner does not explicitly forbid providing the ridges with perpendicular lower edges. This, however, is not tantamount to providing a suggestion that the lower edges can be modified to be made perpendicular to the outer surface of the body. Such suggestion is clearly absent in Brodner, especially in view of the fact that this modification would degrade the Brodner device, as discussed above. As for the ridges illustrated on the left side of Fig. 4, they are clearly shown as being tapered—not perpendicular—to the outer surface of the body.

The Appeal Board further stated:

Brodner's sleeve outer ridges, however, do not need to press against the tray ridges but, rather, can slide between the tray ridges. Sleeve outer ridge lower edges which are perpendicular to the body outer surface would not interfere with the sliding of the outer sleeve ridges between the tray ridges. (Appeal Decision, page 5, line 20 to page 6, line 10).

Applicants agree that once the longitudinally disposed surfaces of the sleeve outer ridges and the tray ridges are actually engaged, the lower edges of the sleeve ridges will not interfere with the sliding of the outer sleeve ridges between the tray ridges. The problem arising from making the lowermost edges of the ridges perpendicular, however, does not occur when the ridges of the respective sleeve and tray have already engaged each other, but rather prior to. That is, in order to initially engage the ridges, the lower most edges of the sleeve ridges must be able to pass the uppermost edges of the tray ridges. As explained above, the use of ridges with lowermost edges that are perpendicular, as opposed to tapered or beveled, would make this difficult.

The Appeal Board indicated in footnote 1 that:

Some rotation of the sleeve may be needed for the sleeve ridges to be positioned between the tray ridges, but such rotation also would be needed if the edges of the ridges were beveled.

Although, conceptually, the sleeve might be manually and deliberately rotated to prevent abutment between the lowermost edges of the sleeve ridges and the uppermost edges of the tray ridges, in practice, this would be very difficult to do due to the tightly toleranced ridges required to facilitate the locking action (as correctly stated in the Board Decision, maximizing the locking action is beneficial). That is, rotation of the sleeve relative to the corresponding tray aperture would have to be perfect to allow the sleeve ridges to slide within the equally dimensioned spaces between the ridges of the tray. Even assuming that perfect rotational alignment between the sleeve and tray aperture can be achieved, one of ordinary skill in the art certainly would not be motivated to modify the Brodner sleeve in this manner, since it would frustrate the ability to easily place the sleeves within the tray apertures. That is, it would require several manual rotations of the sleeve in order to find the perfect fit between sleeve and tray aperture. It should be noted that in the case where the locking action of the Brodner device is created by pressing the ridges of the sleeve into engagement against the ridges of the tray aperture (as opposed to pressing engagement of the sleeve ridges between the tray ridges), axial alignment between the sleeve and tray aperture is necessary. In this case, rotation of the sleeve will not facilitate placement of the sleeve within the tray aperture.

Applicants do not necessarily disagree that rotation of the sleeve would still be needed if the lowermost edges of the ridges were beveled. However, this sleeve rotation would be a natural consequence that would occur as a result of the sliding engagement between the beveled lowermost edges of the sleeve ridges and the beveled uppermost edges of the tray ridges as the sleeve is being placed into the tray. In the case where the locking action of the Brodner device is created by pressing the ridges of the sleeve into engagement with the ridges of the tray, axial alignment

between the sleeve and tray naturally occurs as the beveled edges of the sleeve ridges slide against the beveled edges of the tray ridges, thereby causing the vial to be centered within the tray aperture. Thus, it is clear that the tapered lowermost edges of the Brodner sleeve facilitate initial introduction of the sleeve into the corresponding tray aperture (i.e., it allows the lowermost edges of the sleeve ridges to pass the uppermost edges of the tray aperture), after which the ridges of the sleeve will be pressed into engagement either between the ridges of the tray aperture or against the ridges of the tray aperture.

Lastly, the Appeal Board stated:

If anything, the teaching that the sleeve outer ridges produce a locking type action with the tray ridges (col. 3, lines 38-40) would have fairly suggested, to one of ordinary skill in the art, making the lower edges of both the sleeve outer ridges and the tray ridges perpendicular to the outer surfaces of, respectively, the sleeve and the tray, to maximize the contact area of the abutting ridges and thereby maximize the locking action. (Appeal Decision, page 6, lines 3-10).

Applicants do not understand, however, how making the lower edges of the sleeve outer ridges and tray ridges perpendicular to the outer surfaces of the respective sleeve and tray would maximize the contact area of the abutting ridges to maximize the locking action. It is the longitudinal surfaces of the ridges that provide the locking action—not the lowermost edges of the ridges.

New Claims

Applicants submit claim 27, which has been newly added, finds support in the specification, as originally filed, and is patentable over the cited prior art. In particular, the body of the sample vial is clearly described and illustrated as being a single body. Because claim 27 depends from claim 1, which Applicants believe is patentable over the cited prior art, claim 27 should likewise be patentable over the cited prior art.

Conclusion


Based on the foregoing, all claims are now allowable and a Notice of Allowance is respectfully requested. If the Examiner has any questions or comments regarding this amendment, the Examiner is respectfully requested to contact the undersigned at (714) 830-0600.

Respectfully submitted,

Bingham McCutchen LLP

Dated: December 22, 2003

By: _____


Michael J. Bolan
Reg. No. 42,339

Bingham McCutchen LLP
Three Embarcadero Center
San Francisco, California 94111